

MATHEMATICAL MODELLING OF OBJECTS AND PROCESSES

The Department “Mathematics, Physics and Astronomy” merged in different years the Departments of “Higher Mathematics”, “Applied Mathematics”, “General Scientific Disciplines” and “Physics”. During 90 years, there were generations of highly-qualified lectures and invited Professors, who taught students – future engineers, and actively worked in fundamental sciences.



Among them, there were outstanding scientists – Professors Mark Grigorievich Krein (3.4.1907–17.10.1989), Feliks Ruvimovich Gantmakher (23.2.1908–16.5.1964), Aleksandr Aleksandrovich Zykov (8.8.1922–18.12.2013), who taught mathematics for few years. Yuriy Iosifovich Cherskiy (8.12.1929–2015) was a chair of the Department in 1983–1990. His scientific school is represented in ONMU by Yu.A.Grigoriev.

Also in mathematical analysis, work S. A. Kirillov, S. B. Sivash, L. I. Kusik, N. A. Mazur. The Chair of Department of Physics was Prof. V. A. Tsimarnyi, there work Associate Professors B. V. Puchkov, N. V. Vitiuk, S. I. Iovchev.

Vladimir Platonovich Tsesevich (11.10.1907–28.11.1983), the famous scientist, lecturer, popularizer and organizer of science, in 1952–1967, was a Professor of Department of “Higher Mathematics” of the Odessa Institute of Marine Engineers (current ONMU), and, for some time, a Chair of this Department. Although his main position was the Director of the Astronomical observatory, and, simultaneously, the Chair of the Department of Astronomy of the Faculty of Physics of the Odessa I. I. Mechnikov State (currently National) University, he also lectured in different Universities in Odessa. Astronomy has a great impact to fundamental science and technical applications to the society.



Since 2006, the main scientific topic is “Mathematical modeling of physical processes in astronomical objects”. Prof. I. L. Andronov, associate Professors V. V. Breus, D. N. Doikov, L. S. Kudashkina, M. G. Tkachenko,

active young scientists K. D. Andrych, D. E. Tvardovskii, V. P. Kulynska publish scientific papers in the international journals (currently more than 400). In science, they elaborate algorithms and computer programs for advanced data analysis of variable stars of different types, binary systems with possible exo-planets or stellar-mass companions or pulsators. This is related to international projects ILA (“Inter-Longitude Astronomy”) and “AstroInformatics”.